Dimplex®

Better solutions through innovation

Service Manual

Model Number
DFOP25

IMPORTANT SAFETY INFORMATION: Always read this manual first before attempting to service this fireplace. For your safety, always comply with all warnings and safety instructions contained in this manual to prevent personal injury or property damage.

Dimplex North America Limited
1367 Industrial Road • Cambridge ON Canada N1R 7G8
1-888-346-7539 • www.dimplex.com

REV	PCN	DATE
00	-	18-AUG-11
01	-	4-APR-14

In keeping with our policy of continuous product development, we reserve the right to make changes without notice.
© 2014 Dimplex North America Limited

7400400000R01

TABLE OF CONTENTS

OPERATION 3
MAINTENANCE 4
EXPLODED PARTS DIAGRAM 7
WIRING DIAGRAM 8
LOWER ASSEMBLY ACCESS 9
HEATER ASSEMBLY REPLACEMENT 9
ASSEMBLY PART PICTURES 10
TROUBLESHOOTING GUIDE 13

Always use a qualified technician or service agency to repair this fireplace.

! **NOTE:** Procedures and techniques that are considered important enough to emphasize.

⚠ **CAUTION:** Procedures and techniques which, if not carefully followed, will result in damage to the equipment.

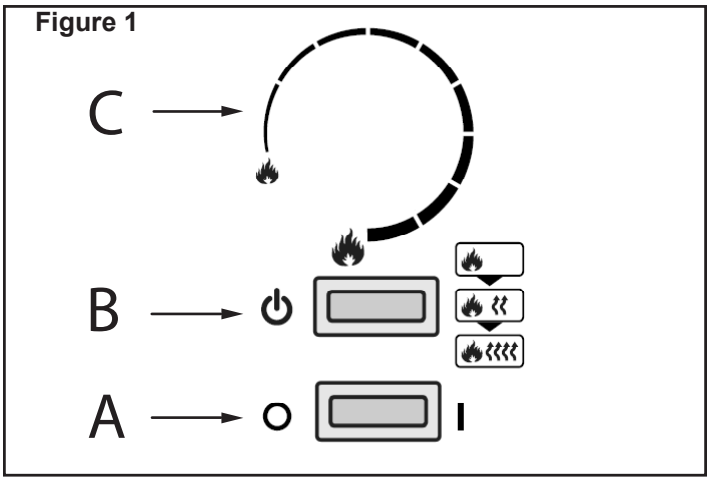
⚠ **WARNING:** Procedures and techniques which, if not carefully followed, will expose the user to the risk of fire, serious injury, or death.

OPERATION

Manual Controls

The manual controls are located behind the drawer. (Figure1)

Figure 1



Switch "A" - Controls the electricity supply to the fireplace.

! **NOTE:** This switch must be in the 'ON' (I) position for the fireplace to operate with or without heat.

Switch "B" - Controls the function of the fireplace.

1. Press once to the right to turn on flame effect. This will be indicated by one beep.

! **NOTE:** Although the main lights operate immediately it will take a further 30 seconds before the flame effect starts.

2. Press second time to the right to give flame effect and half heat. This will be indicated by two beeps.
3. Press third time to the right to give flame effect and full heat. This will be indicated by three beeps.
4. Press fourth time to the right to return to flame effect only. This will be indicated by one beep.
5. Press once to the left to turn the flame and heat functions off. This will be indicated by one beep.

Control Knob "C" - Controls the intensity of the flame effect. Turning the control knob clockwise increases the flame effect, turning the control knob counter-clockwise will decrease the flame effect.

! **NOTE:** When the water tank is empty the main lamps go out. See instructions under "Maintenance" – "Filling the water tank". When this procedure is complete, the main lamps will illuminate but it will take 30 seconds, before the flame effect return.

REMOTE CONTROL OPERATION

On the control panel, Switch A (Figure 1) must be in the 'ON' (I) position in order for the remote control to operate. There are 3 buttons on the remote control. (Figure 2)

! **NOTE:** To operate correctly the remote control must be pointed towards the front ember bed.

The remote control functions are as follows:

1. Press "A" button once to turn on flame effect only. This will be indicated by one beep.
2. With flame effect in operation, press "C" button to turn on Half heat. This will be indicated by two beeps.
3. Press the "C" button a second time to turn on Full heat with flame effect. This will be indicated by three beeps.
4. Press the A button to return to flame effect only, (Heat Off)
5. Press the "B" button to turn off the flame and heat functions. This will be indicated by one beep.

! **NOTE:** Pressing the "C" button once when all functions are off, both the flame effect and low heat will come on simultaneously. There will be two beeps

! **NOTE:** Flame intensity is adjusted by using the manual control. ("C" on Figure 2). This can not be adjusted by the remote control.

Battery Information

1. Unclip the battery cover on the back of the remote control. (See Figure 2)
2. Install (2) AAA batteries into the remote control.
3. Replace the battery cover.

Discard Leaky Batteries: Dispose of batteries in the proper manner according to provincial or state regulations.

Any battery may leak electrolyte if:

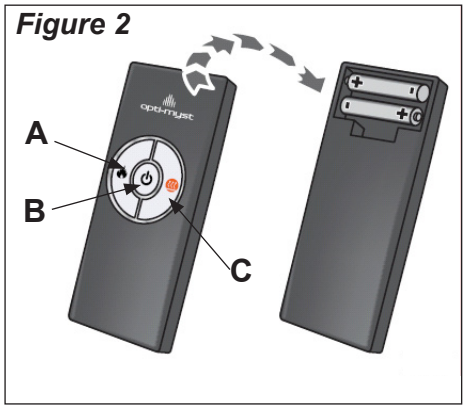
- Mixed with a different battery type,
- If inserted incorrectly,
- If all the batteries are not replaced at the same time,
- If disposed of in a fireplace,
- Or if an attempt is made to charge a battery not intended to be recharged.

Thermal Safety Cut-out

A thermal safety cut-out is incorporated in the fan heater to prevent damage due to overheating. This can happen if the heat outlet is restricted in any way. If the cut-out trips, unplug the fireplace from the socket outlet and allow approximately 10 minutes before reconnecting. Before switching the fireplace back on remove any obstruction that may be restricting the heat outlet, then continue normal operation.

If you need to continuously reset the heater, or require after sales service, disconnect power and contact Technical Services at www.dimplex.com or call 1-888-DIMPLEX, (1-888-346-7539).

Figure 2



Tips for using your appliance.

1. Only pull out the drawer when its time to refill the water tank or change a lamp, otherwise it may lead to excess water in the sump and reduced flame effect. If this happens empty the water from the sump as instructed under ‘Maintenance’.
2. With the flame setting on minimum the unit will use approximately 40ml of water per hour and will last 3 times as long than when it is at maximum flame setting.
3. Do not tilt or move the fireplace while there is water in the tank or sump.
4. Make sure that the fireplace is on a level floor.
5. The flame control knob ‘C’ (Fig.2) may be turned up or down to give a more realistic effect.
6. Sometimes the flames appear more real when the flame control knob is turned down.
7. Give the flame generator some time to react to changes you may make on the flame control knob.

MAINTENANCE

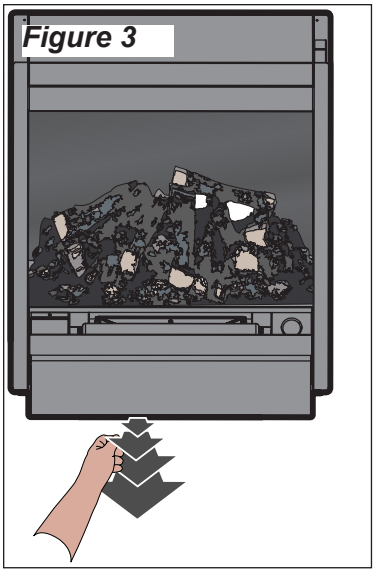
⚠ **WARNING:** Disconnect power before attempting any maintenance or cleaning to reduce the risk of fire, electric shock or damage to persons.

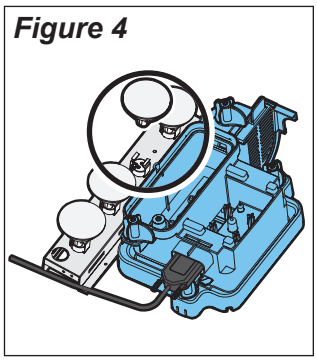
Changing Lights/Lamps

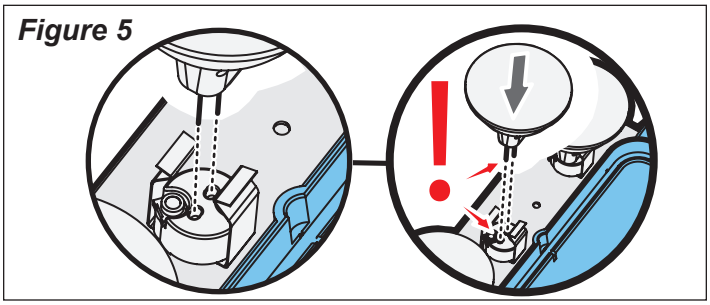
If a large amount of the smoke appears grey or colorless it may be that one or more lamps have failed.

You can check for lamp failure as follows:

1. Leaving the flame effect on, open the drawer fully, gently pull the drawer fully out by the tab. (Figure 3)
2. View the lamps from a distance in front of the fireplace and observe which lamp needs to be changed.
3. Put Switch ‘A’ in the ‘OFF’ position, and unplug the fireplace from the mains.
4. Leave the appliance for 20 minutes to allow the lamps to cool down before removing them.
5. Remove the water tank by lifting upwards and place in a sink.
6. Remove the sump as described in the Cleaning Section.
7. Remove the defective lamp, by gently lifting vertically and disengaging the pins from the lamp holder, (Figure 4 and 5). Replace with a Mystic original, 12V, 50W, Gu5.3 base, 8º beam angle, colored lamp. Purchase the lamps from your local supplier.
8. Carefully insert the two pins of the new lamp into the two holes in the lamp holder. Push firmly in place. (Figure 4 and 5).
9. Replace the sump and water tank and carefully close the drawer.
10. Switch on.







Filling the Water Tank

! **NOTE:** When the water tank is empty, flame and smoke effect shuts off and you will hear 2 audible “beeps”.

Follow these steps to refill:

1. Press Switch ‘A’ to (0). (Figure 2)
2. Pull out the drawer as far as possible by the tab. (Figure 3)
3. Remove the water tank by lifting upwards and outwards.
4. Place the water tank in sink and remove cap, counter-clockwise to open.
5. Fill tank with filtered tap water with a maximum hardness of 10 dH only. This is necessary to prolong the life of the flame and smoke producing unit. In situations or areas with higher water hardness, the water should be filtered through a water filtering system.

! **NOTE:** Do not use a decalcifier.

6. Screw the cap back on.

! **NOTE**: Do not over-tighten.

7. Return the tank to the sump, with the tank cap facing down and the flat side of the tank facing outward.
8. Press Switch ‘B’ once to turn on flame effect. (See manual control section, Figure 2).
9. Press Switch ‘A’ to ‘ON’ (I) position. (Figure 2)
10. Gently push the drawer back in as far as it will go.

Cleaning

WARNING: Disconnect power before attempting any maintenance or cleaning to reduce the risk of fire, electric shock or damage to persons.

We recommend cleaning the following components once every 2 weeks, particularly in hard water areas:

- Water Tank
- Sump and Seal
- Sump lid
- Tank cap and seal
- Air filter

For general cleaning use a soft clean duster – never use abrasive cleaners. To remove any accumulation of dust or fluff, the soft brush attachment of a vacuum cleaner should occasionally be used to clean the heat outlet grill of the fan fireplace.

Water tank

1. Remove water tank, as described earlier, put into sink and empty water.
2. Using the supplied brush gently rub the inside surfaces of the cap paying particular attention to the rubber ring in the outer groove and the centre rubber seal.
3. Put a small quantity of liquid dish soap into the tank, refit the cap and shake well, rinse out until all traces of dish soap are gone.
4. Refill with tap water with a maximum hardness of 10 dH only, replace the cap,

NOTE: Do not over-tighten.

5. Do not use a decalcifier when cleaning the appliance. This may shorten the lifetime of the smoke unit.

Sump

1. Press Switch ‘A’ to the ‘OFF’ (0) position
2. Gently pull the drawer out as far as possible. (Figure 3)
3. Remove the water tank by lifting upwards.
4. Disconnect the electrical connector, located on the left side of the sump, by first loosening the two retaining screws and gently withdrawing the connector. (Figure 6)
5. Release the lower sump locking tabs by turning 90º, this allows the sump to be lifted completely from its location. (Figure 7)
6. Gently lift up the sump assembly, taking care to keep level so as not to spill any water. Sit the assembly in the sink. (Figure 8)
7. Release the two upper sump locking tabs by turning 90º, then lift off the sump lid. (Figure 9)
8. Carefully tilt, as shown, so that the liquid drains out of the sump. (Figure 10)
9. Put a small amount of washing up liquid into the sump, and using the supplied brush, gently clean all surfaces including the metal disc and the rubber seal located in the top grooved surface.

NOTE: Do not remove the rubber seals. (Figure 11

Figure 6

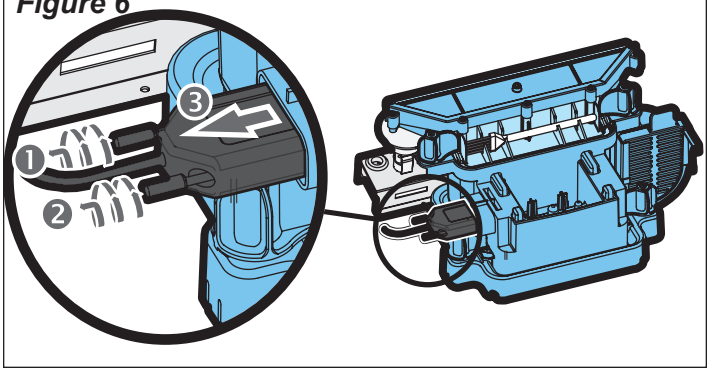


Figure 7

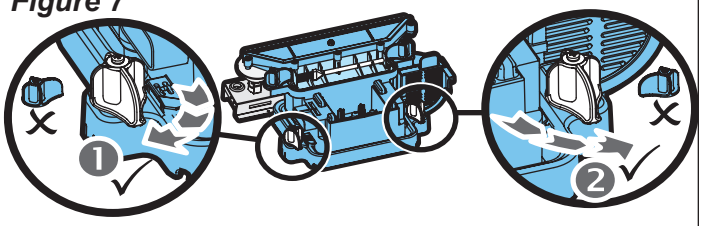


Figure 8

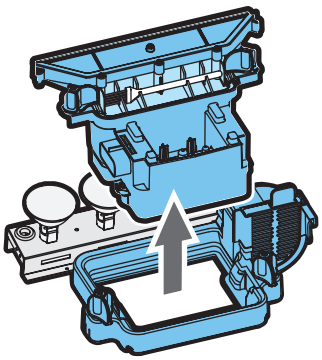


Figure 9

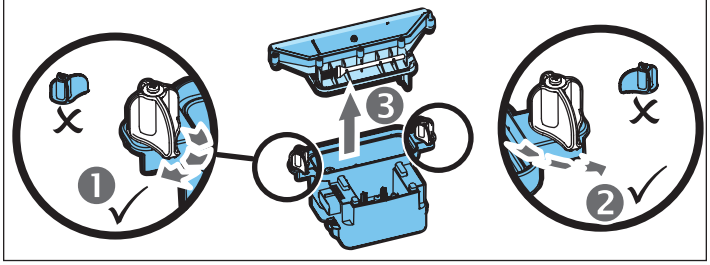
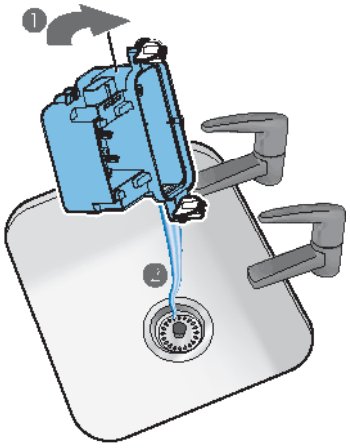


Figure 10



and 12)

10. When cleaned, thoroughly rinse the sump with clean water.
11. Clean the outlet surface of the sump lid with the brush and flush out thoroughly with water. (Figure 13 and 14)
12. Reverse the above steps to reassemble.

Air Filter

1. Gently pull the drawer out as far as possible. (Figure 3).
2. Press Switch ‘A’ to the ‘OFF’ (O) position (Figure 2)
3. Remove the tank and place in a sink with the cap facing upwards.
4. Gently slide upwards the air filter plastic holder. (Figure 15)
5. Remove the filter combination from the plastic holder.
6. Gently rinse with water in the sink and dry with a cloth towel before returning.
7. Replace the filter combination making sure that the course black filter is in contact with the plastic holder. (Figure 16)
8. Replace the tank.
9. Press Switch ‘A’ to the ‘ON’ (I) position (Figure 2).
10. Close the drawer completely.

Figure 11

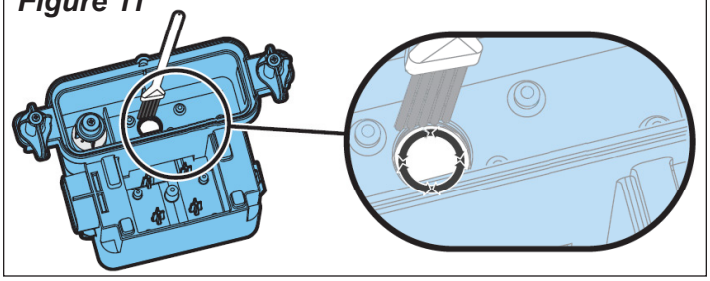


Figure 12

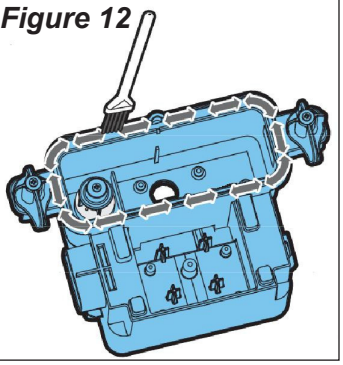


Figure 13

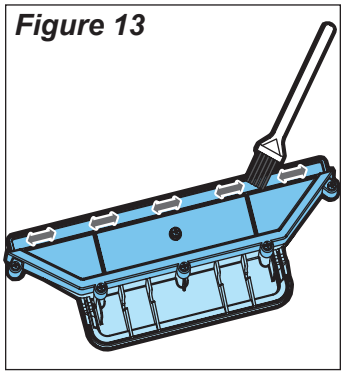


Figure 14

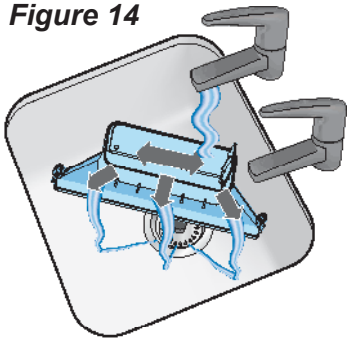


Figure 15

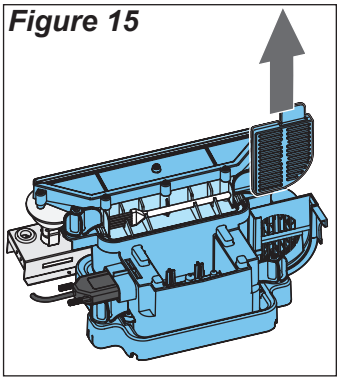
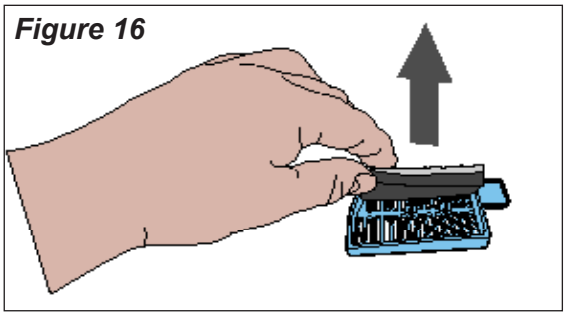
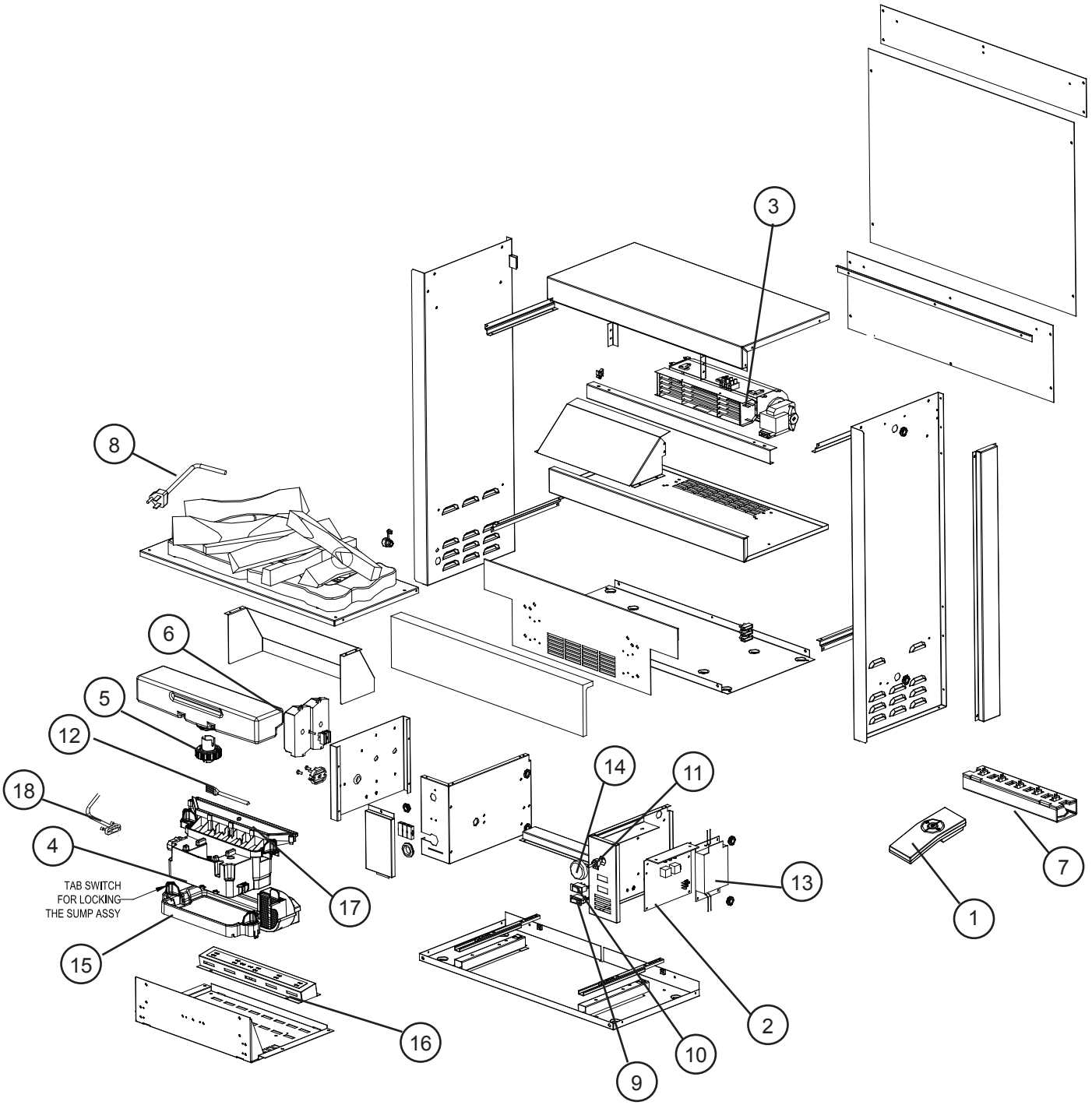


Figure 16



EXPLODED PARTS DIAGRAM

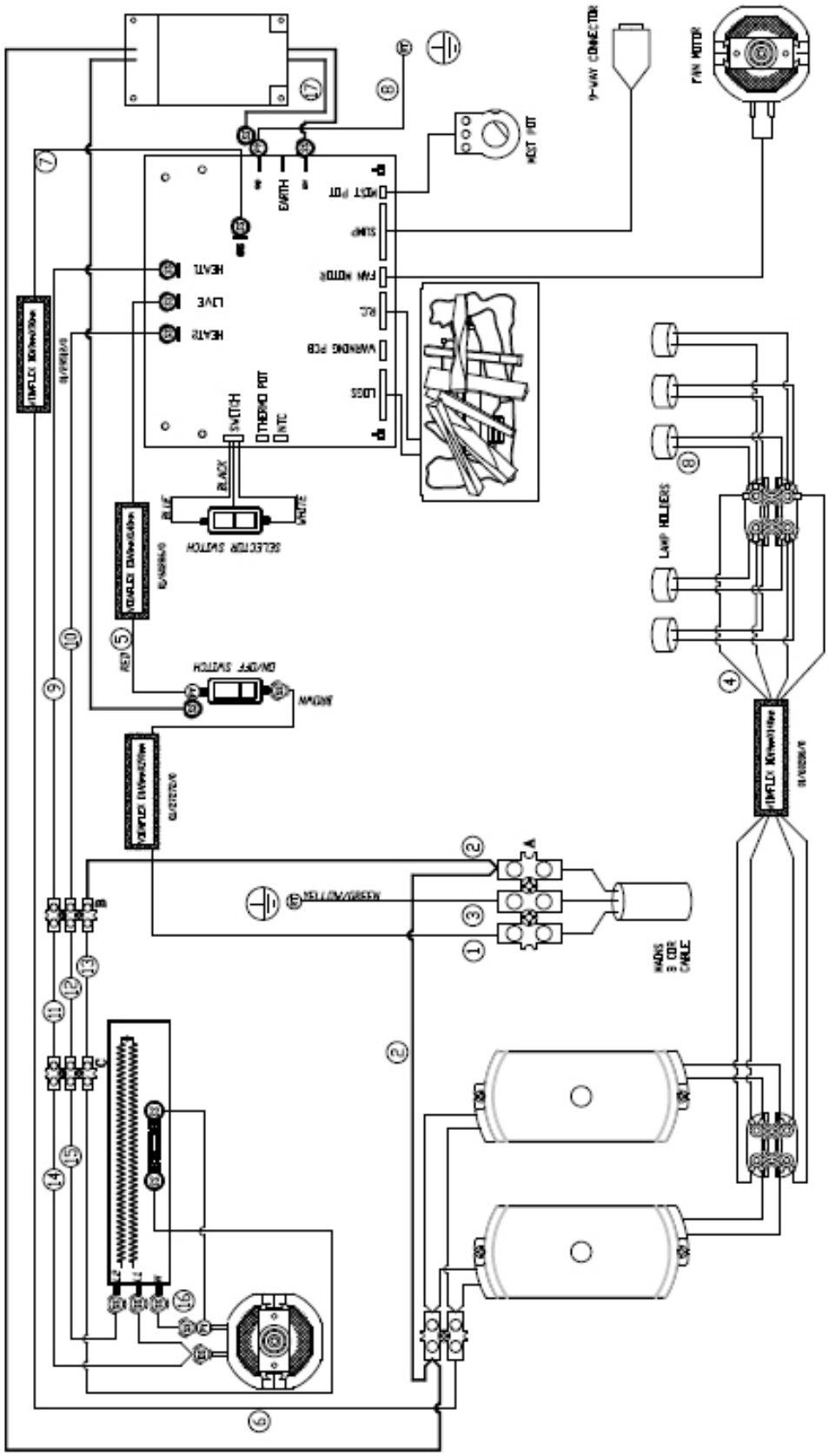


Replacement Parts List

Replacement Part:

1. Remote Control 9600385600RP
2. Remote Control Receiver 9600384000RP
3. Heater Assembly 9600384800RP
4. Sump Pump Assembly 9600385000RP
5. Lid Assembly 9600383900RP
6. Transformers (2 in each unit) 9600384700RP
7. Halogen Lamps (carton of 5) 9600384300RP
8. Power Cord 9600385500RP
9. On/Off Switch 9600383500RP
10. Momentary Switch 9600383600RP
11. Potentiometer 9600383700RP
12. Cleaning Brush 9600384100RP
13. Power Supply 9600384500RP
14. Control Knob 9600384900RP
15. Sump Locator Assembly 9600385100RP
16. Lamp Holder Assembly 9600385200RP
17. Mist Nozzle Assembly 9600385300RP
18. 9-Way Connector (Plug & Cord) 9600385400RP
19. Replacement Door Magnet Kit 9600490100RP

WIRING DIAGRAM



LOWER ASSEMBLY ACCESS

Tools Required: Philip's head screwdriver
Needle nose pliers.

WARNING: If the fireplace was operating prior to servicing, allow at least 20 minutes for light bulbs and heating elements to cool off to avoid accidental burning of skin.

WARNING: Disconnect power before attempting any maintenance to reduce the risk of electric shock or damage to persons.

NOTE: For replacing the Heater Assembly or the Sump Pump Assembly please skip this section and go to the corresponding pages for these parts.

For all other parts please proceed with the following instructions:

1. Remove the firebox out of the cabinet or wall frame that surrounds the unit.
2. Disconnect power before attempting any maintenance.
   - Unplug the fireplace from the outlet.
   - Or turn the breaker off at the electrical panel.
3. Remove the 4 screws from the rear-middle panel. (There is an upper, middle and lower panel on the back of the fireplace).
4. Remove the 2 screws on the front lower corners. (1) on the left and (1) on the right side behind the drawer.
5. Remove the 2 screws – (1) left and (1) right rear corner of the LED log set. These screws are inserted directly into the rubberized material that forms the logs.
6. Lift the backside of the lower assembly (logs and drawer) just enough to clear the hidden mounting brackets located beneath the logs. Slide this entire lower assembly forward a few inches. Disconnect the 3 wires from the white power cord connected to the terminal block on the left side. (See Assembly Part Pictures)

NOTE: Be sure to take note of the original position of the wires on the terminal block.

7. Once these wires are disconnected continue to slide this bottom assembly forward and rest it just in front of the fireplace chassis.

NOTE: With this bottom drawer removed you can now access all parts with the exception of the heater assembly, which is located on the top panel of the fireplace.

8. Identify the part to be replaced and how they are secured.

   The left side of the drawer has:
   - 2 transformers - Philips head screws
   - 3 terminal blocks - Philips head screws
   - Power Cord - Philips head screws

   The right side of the drawer has:
   - Remote control receiver/power board - Plastic mounting tabs
   - Stepper board - Plastic Mounting tabs
   - Main on/off switch - integral mounting tabs (squeeze to release)
   - 3-stage selector switch - integral mounting tabs (squeeze to release)
   - Flame intensity controller - to remove, pull the knob off the potentiometer shaft, then using a pair of needle nose pliers turn the jam nut counter clockwise through the opening around the shaft.
   - LED Log set Wire harness plugged into the Remote Control Receiver - to remove, unplug from the remote control receiver and remove 5 screws, – (1) (x4) on each corner and (1) on the front right side, approximately 3" inches to the left of the corner screw.

   Inside the drawer has:
   - Halogen Light Assemblies
   - Sump Pump Assembly
   - Water Reservoir
   - Mist Effect Fan/Air Filter

NOTE: For removal of components inside of drawer please see Operation section of this manual.

9. Remove the wires from the part to be replaced noting their original location.
10. Release the mounting hardware securing the part, and remove it from it's location.
11. Secure the new part into the same location as the original part.
12. Reconnect the wires according to their original location/ configuration.
13. Re-assemble in reverse order as above.

HEATER ASSEMBLY REPLACEMENT

TOOLS REQUIRED: Philip's head screwdriver

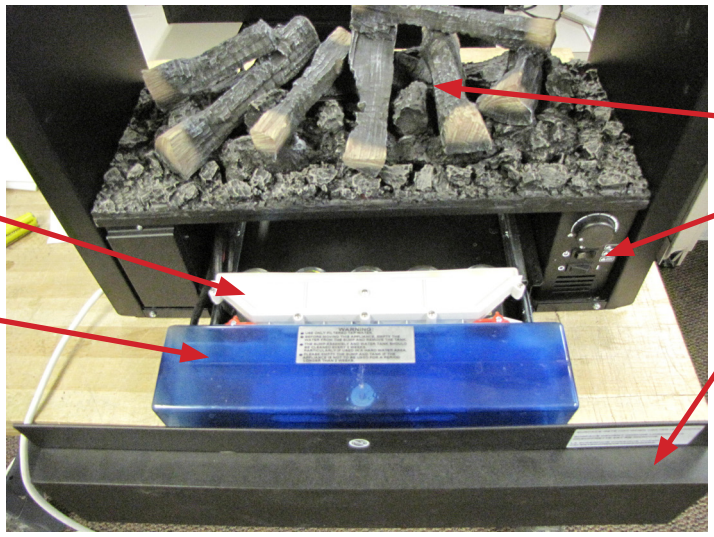
WARNING: If the fireplace was operating prior to servicing, allow at least 20 minutes for light bulbs and heating elements to cool off to avoid accidental burning of skin.

WARNING: Disconnect power before attempting any maintenance to reduce the risk of electric shock or damage to persons.

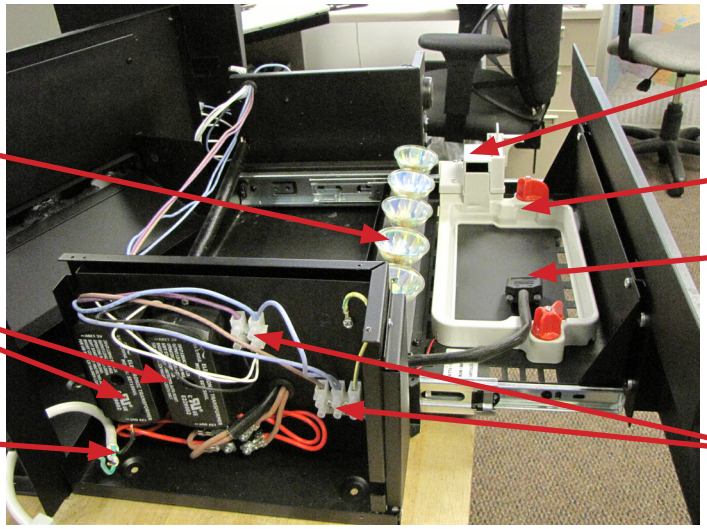
1. Remove the firebox out of the cabinet or wall frame that surrounds the unit.
2. Disconnect power before attempting any maintenance.
   - Unplug the fireplace from the outlet.
   - Or turn the breaker off at the electrical panel.
3. Remove the 7 screws, which secure the top panel to the fireplace from the exterior. (3) on the left side, (3) on the right side, (1) on the back side of this top panel.
4. From underneath the heater assembly, mounting panel, remove the 4 screws that secure the heater assembly to the rest of the fireplace.
5. Disconnect the wires attached to the heater assembly elements and blower motor noting their original location and reconnect onto the new heater assembly.
6. Lift the old assembly out of the top heater housing.
7. Line up the new heater assembly and secure with the 4 original screws from underneath.
8. Re-attach the 7 screws to the top panel.

ASSEMBLY PART PICTURES

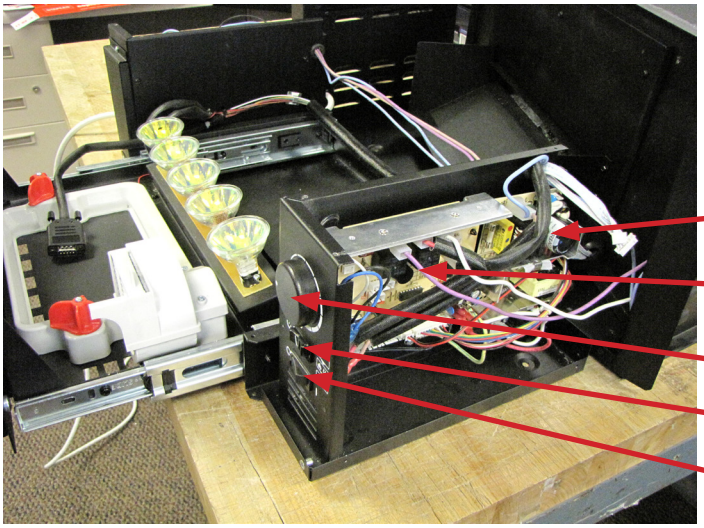
View of DFOP25 lower assembly - Drawer is open



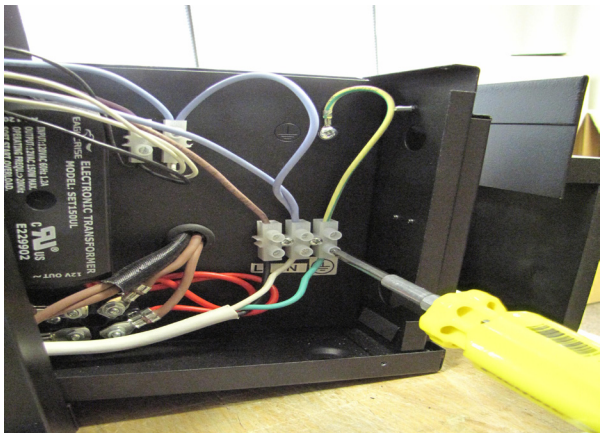
Left Side View of Lower Assembly - Logs, Sump Assembly and Water Reservoir Removed



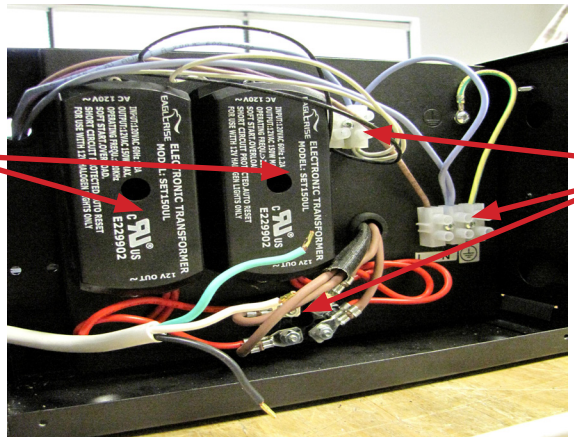
Right Side View of Lower Assembly - Logs, Sump Assembly and Water Reservoir Removed.



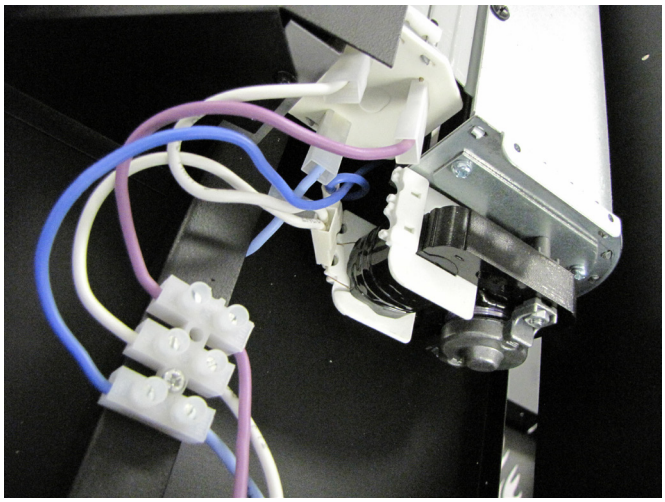
Terminal Block and Power Cord Connection - Disconnect cord to remove lower assembly



Left Side View with Power Cord Disconnected

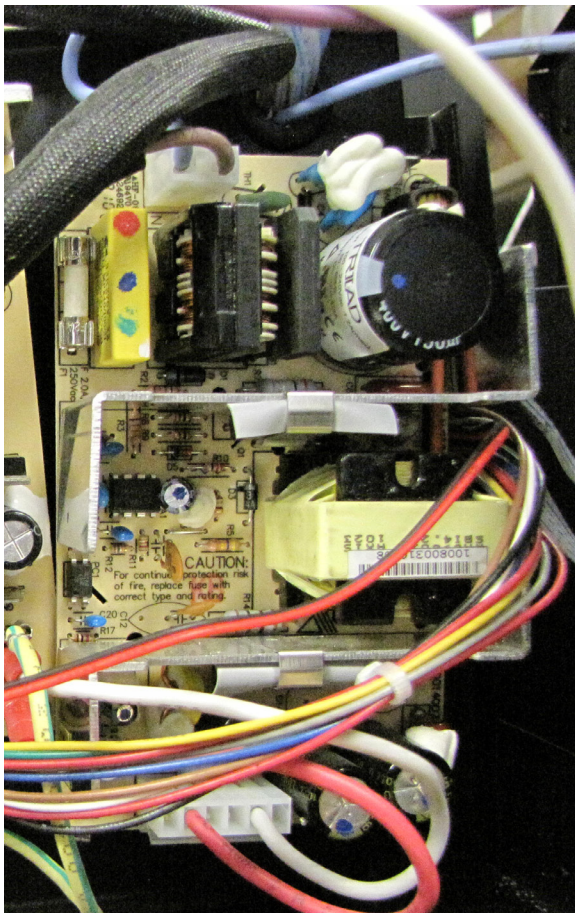


Heater Assembly Connections and Terminal Block



Mounted on the inside of the heater housing, under the top panel.

Voltage Step Down Circuit Board



TROUBLESHOOTING GUIDE

PROBLEM	CAUSE	SOLUTION
General		
Circuit breaker trips or fuse blows when unit is turned on	Short in unit wiring.	Trace wiring in unit.
	Improper circuit current rating	Additional appliances may exceed the current rating of the circuit breaker or fuse. Plug unit into another outlet or install unit on a dedicated 15 amp circuit.
Lights dim in room while the unit is on	Unit is drawing close to circuit current rating	Move the unit to another outlet or install unit on a dedicated 15 amp circuit
Power cord gets warm	Normal Operation	The power cord may get slightly warm to the touch when the heater is on
	Defective power cord	Replace power cord if cord gets hot to the touch.
Unpleasant smell when unit is used.	Dirty or stale water.	Clean the unit as described under maintenance.
	Using unfiltered tap water.	Use tap water with a maximum hardness of 10 dH only.
Appearance		
The flame effect will not start.	Main plug is not plugged in.	Check plug is connected to wall socket correctly.
	Switch A is in the 'ON' (I) position, but mode Switch B has not been pressed. (Figure 2)	Press Switch B once for flame effect. (Figure 2)
	Low water level.	Check the water tank is full and there is water in the sump.
	Low voltage connector not connected properly. (Figure 6)	Check that the connector is inserted correctly. (Figure 8)
The flame effect is too low.	Flame effect control knob is set too low. (Figure 2)	Increase level of flame by turning Control knob C to the left slowly. (Figure 2)
	The water in the sump may be too high due to the drawer being opened and closed a number of times, water tank removed a number of times, or the fireplace has been moved.	If water level in the sump is more than 40mm, the sump should be removed and emptied in the sink.
	Metal Disc at the base of Sump might be dirty (Figure 11)	Clean Metal Discs with soft brush supplied. (Figure 13) See 'Maintenance.' for a step by step procedure.
The flame effect has too much smoke.	Flame effect setting is too high.	Turn the flame effect Control knob "C" to the right until it is at minimum and slowly turn to the left, about ¼ a turn, at a time. Give the flame generator some time to adjust before increasing. (Figure 2)
Main lamps are not working and there are no flames or smoke, but heater is still functioning.	There is no water in the tank.	Follow instructions under Maintenance, 'Filling the water tank'.
		Check the plug is connected to wall socket correctly. Switch 'A' (Figure 2) is in the 'ON' (I) position. Press switch 'B' Fig.2 until you can hear one beep only, for flame effect.

PROBLEM	CAUSE	SOLUTION
Heater		
Heater is not turning off	Improper operation	Refer to Operation Section
	Defective heater on/off switch	Replace heater on/off switch
	Defective remote control receiver	Replace remote control receiver.
Heater is not turning on	Improper operation	Refer to Operation Section
	Loose wiring	Trace Wiring
	Defective heater assembly	Replace heater assembly
	Defective momentary switch	Replace momentary switch
Heater is turning off after a couple of minutes of operation	Build up of dirt/dust in heater assembly	Ensure that exterior intake louvers and firebox cavity are free of dirt/dust.
	Defective Heater Assembly	Replace Heater Assembly
Heater emits an odor	Normal Operation	Normal operation is when the heater emits an odor for a brief period after the heater is initially turned on. The heater is burning off any dust accumulated during manufacturing or operation.
	Defective heater assembly	Replace heater assembly
Heater fan turns on but heater lacks heat	Improper operation	Refer to Operation Section
	Loose wiring	Trace wiring in unit
	Defective heater assembly	Replace heater assembly
Heating element is glowing red	Normal Operation	Small glowing sections of the element are considered normal.
	Defective heater assembly	If larger glowing sections are causing the heater to trip the thermal cutout, unplug unit, discontinue use and replace heater assembly.
Heater fan runs continuously	Loose wiring	Trace wiring in unit
	Defective momentary switch	Replace momentary switch
	Defective heater assembly	Replace heater assembly
Noise		
Excessive noise with the heater on	Dirty heater assembly	Ensure that exterior intake louvers and firebox cavity are free of dirt/dust.
	Defective heater assembly	Replace heater assembly